IN THE CLAIMS

Please rewrite claims 1, 2, 10, 19, 40, 53, 58 and 79 as follows. Please cancel claims 80-81 without prejudice and add new claim 82.

1.   (Amended) A method of generating a display comprising a plurality of pixels on a screen comprising:

provuding at least a pair of specular light intensity functions, wherein each specular light intensity function is representative of the specular light reflected by a respective pixel at a different surface reflectance characteristic;

determining a specularity modulation value for a respective pixel by retrieving the specularity modulation value from a memory;

interpolating the specular light intensity functions using the specularity modulation value to obtain a composite specularity value; and

using said composite specularity value to modulate pixel color on said screen.

2.   (Amended) The method of claim 1 wherein the step of providing at least a pair of specular light intensity functions comprises providing a maximum specular light intensity function and a minimum specular light intensity function.

10.   (Amended) The method of claim 1 wherein the step of determining the specularity modulation value comprises retrieving the specularity modulation from a two-dimensional map contained in a texture memory.

19.   (Amended) A method of generating polygon surfaces in a rendering system for a display comprising a plurality of pixels, the method comprising:

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generating a polygon surface represented by a plurality of vectors for each pixel in said plurality of pixels, the vectors including a light source vector, a surface normal vector and a view vector;

providing at least a pair of specular light intensity functions, wherein each specular light intensity function is representative of the specular light reflected by a respective pixel at different surface reflectance characteristic;

determining a specularity modulation value for a respective pixel by retrieving the specularity modulation value from a memory;

interpolating the specular light intensity functions using the specularity modulation value to obtain a composite specularity value; and

using said composite specularity value to modulate pixel color on said screen.

40. (Amended) A method of generating a display comprising a plurality of pixels on a screen comprising:

providing at least a pair of color intensity functions, wherein each color intensity function is representative of the color reflected by a respective pixel at a different surface reflectance characteristic;

determining a color modulation value for a respective pixel by retrieving the color modulation value from a memory;

interpolating the color intensity functions using the color modulation value to obtain a composite color value; and

using said composite color value to modulate pixel color on said screen.

53. (Amended) The method of claim 40 wherein the step of providing at least a pair of color intensity functions comprises specifying a specular exponent value for at least one of the functions.

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58.   (Amended) A method of generating polygon surfaces in a
rendering system for a display comprising a plurality of pixels, the method
comprising:

        generating a polygon surface represented by a plurality of
vectors for each pixel in said plurality of pixels, the vectors including a light
source vector, a surface normal vector and a view vector;

        providing at least a pair of color intensity functions, wherein each
color intensity function is representative of the specular light reflected by a
respective pixel at different surface reflectance characteristic;

        determining a color modulation value for a respective pixel;

        interpolating the color intensity functions using the color
modulation value to obtain a composite color value; and

        using said composite color value to modulate pixel color on said
screen.

79.   (Amended) A method of generating polygon surfaces in a
rendering system for a display comprising a plurality of pixels, the method
comprising:

        generating a polygon surface represented by a plurality of
vectors for each pixel in said plurality of pixels, the vectors including a light
source vector, a surface normal vector and a view vector;

        in real time, using one or more values from a map to determine
a reflectivity of the polygon surface for a respective pixel in the polygon;

        using the determined reflectivity to calculate the specular
reflection at the respective pixel in the polygon including calculating the
specular reflection using two or more specularity functions .

82.   (New) A method of generating a display comprising a plurality of
pixels on a screen comprising:

        providing at least a pair of specular light intensity functions,
wherein each specular light intensity function is representative of the specular

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